WHAT IS CLAIMED IS:

1. A film-forming system comprising a vacuum chamber and an electroconductive partition plate dividing said vacuum chamber into two spaces, one of said two spaces is formed as a plasma generating space provided with a high-frequency electrode and the other space is formed as a film-forming treatment space provided with a substrate-retaining mechanism for holding a substrate mounted thereon;

said electroconductive partition plate is provided with a plurality of penetration holes for communicating the plasma generating space with the film-forming treatment space;

a gas for generating desired active species by discharge plasma is introduced into the plasma generating space;

said desired active species generated in the plasma generating space are supplied to the film-forming treatment space through said plurality of the penetration holes in the electroconductive partition plate;

said electroconductive partition plate has a first internal space separated from the plasma generating space and communicating with the film-forming treatment space via a plurality of material gas diffusion holes;

a material gas is introduced from the outside into said first internal space and supplied into the film-forming treatment space through a plurality of said material gas diffusion holes; and a film is deposited on the substrate by a reaction between said active species and said material gas supplied to said film-forming treatment space;

wherein said electroconductive partition plate further has a second internal space separated from said first internal space and communicating with said film-forming treatment space via a plurality of gas diffusion holes, and a gas other than said material gas is introduced from the outside into

said second internal space.

2. A film-forming system comprising a vacuum chamber and an electroconductive partition plate dividing said vacuum chamber into two spaces, one of said two spaces is formed as a plasma generating space provided with a high-frequency electrode and the other space is formed as a film-forming treatment space provided with a substrate-retaining mechanism for holding a substrate mounted thereon;

said electroconductive partition plate is provided with a plurality of penetration holes for communicating the plasma generating space with the film-forming treatment space;

a gas for generating desired active species by discharge plasma is introduced into the plasma generating space;

said desired active species generated in the plasma generating space are supplied to the film-forming treatment space through said plurality of the penetration holes in the electroconductive partition plate;

said electroconductive partition plate has a first internal space separated from the plasma generating space and communicating with the film-forming treatment space via a plurality of material gas diffusion holes;

a material gas is introduced from the outside into said first internal space and supplied into the film-forming treatment space through a plurality of said material gas diffusion holes; and a film is deposited on the substrate by a reaction between said active species and said material gas supplied to said film-forming treatment space;

wherein the diameter of said penetration holes is smaller in the side of the plasma generating space than in the side of the film-forming treatment space;

said electroconductive partition plate further has a second internal space separated from said first internal space and communicating with said

penetration holes via gas introduction holes, and a gas other than the material gas is introduced from the outside into said second internal space.

3. A film-forming system according to claim 1, wherein the material gas is a monosilane gas, a disilane gas, a trisilane gas or a tetraethoxysilane gas.

4. A film-forming system according to claim 1, wherein the gas for generating desired active species by discharge plasma in the side of the plasma generating space includes an oxygen gas.

5. A film-forming system according to claim 1, wherein the gas for generating desired active species by discharge plasma in the side of the plasma generating space includes an inert gas.

6. A film-forming system according to claim 1, wherein the gas other than the material gas introduced into the second internal space includes an oxygen gas.

7. A film-forming system according to claim 1, wherein the gas other than the material gas introduced into the film-forming treatment space includes an added gas comprising any one or combinations selected from an ammonia gas, a nitrogen dioxide gas, an ethane gas and an ethylene gas.

8. A film-forming system according to claim 1, further comprising a flow-rate controller for controlling the flow rate of a gas for generating desired active species by discharge plasma in the side of the plasma generating space and a flow-rate controller for controlling the flow rate of a gas other than the material gas introduced into the second internal space, both of the flow-rate controllers being able to be independently controlled.

9. A method of forming a film on the substrate by using the film-forming system described in claim 1.

10. A method of forming a film on the substrate by using the film-forming system described in claim 2.

11. A method of forming a film on the substrate by using the film-forming system described in claim 3.

12. A method of forming a film on the substrate by using the film-forming system described in claim 4.

13. A method of forming a film on the substrate by using the film-forming system described in claim 5.

14. A method of forming a film on the substrate by using the film-forming system described in claim 6.

15. A method of forming a film on the substrate by using the film-forming system described in claim 7.

16. A method of forming a film on the substrate by using the film-forming system described in claim 8.